Placenta accreta spectrum

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1 Placenta accreta spectrum describes abnormally adherent or invasive placentas

In normal pregnancy, a blastocyst implants into the endometrium, and after delivery, the placenta detaches from the uterus. In placenta accreta spectrum, the placenta forms at a site of disruption between the endometrium and myometrium. Placental tissue implants onto the myometrium (accreta), into the myometrium (increta) or through the myometrium to surrounding organs (percreta) (Figure 1). This prevents placental detachment, which can result in severe hemorrhage and increased risk of maternal morbidity and mortality.[1–4]

2 The most common risk factor is multiple previous cesarean deliveries

In a large systematic review, the rate of placenta accreta spectrum increased from 0.3% in women with 1 previous cesarean delivery to 6.7% in women with 6 previous cesarean deliveries.[5] Additional risk factors include uterine surgery and assisted reproduction.[1–3]

3 Placenta previa substantially increases the risk of placenta accreta spectrum

Among women with placenta previa and history of previous cesarean delivery, the risk of placenta accreta spectrum increases from 11% after 1 cesarean delivery to 60% after 3 or more cesarean deliveries.[4,5] Placenta previa occurs in about 3% of pregnancies.[5]

4 Women with placenta previa and a history of cesarean delivery should have targeted ultrasounds in centres of excellence

Although findings on imaging are present throughout pregnancy, placenta accreta spectrum is commonly suspected during the routine anatomy scan performed at 18 to 20 weeks.[1,4] A combination of transabdominal and transvaginal ultrasound achieves diagnostic sensitivity of 90% (95% confidence interval [CI] 87%–93%) and specificity of 97% (95% CI 96%–97%).[1] Magnetic resonance imaging can be an adjunct when assessing posterior placentas and depth of invasion.[1,4]

5 Management of placenta accreta spectrum requires specialized teams

Early referral to centres of excellence reduces maternal morbidity, including the need for massive transfusion and multiple surgical interventions.[1,4] Centers of excellence typically follow standardized protocols and care pathways, bringing together specialists in maternal fetal medicine, gynecology, anesthesia and neonatology, as well as allied health professionals.

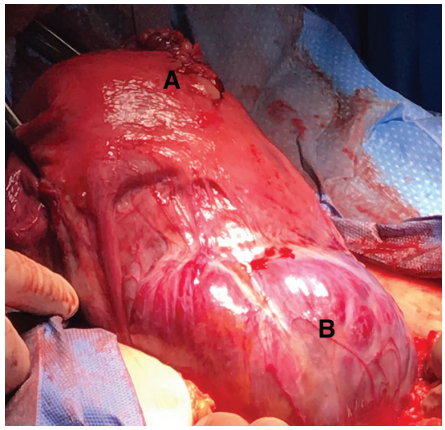

Figure 1: Intraoperative cesarean hysterectomy for placenta percreta in the context of placenta previa. The baby was delivered through a classical fundal incision (A), which was closed before the hysterectomy was begun. The placenta was left in situ with bulging, vascular placental tissue visible under the uterine serosa (B). Final pathology reported placenta percreta with invasion into the bladder wall.

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